



ENVIRONMENTAL MANAGEMENT PROGRAM REFUSE DISPOSAL DIVISION



Landfill Operations

Capacity development/Disposal Operations

Process Map Number(s): DO-1.0, DO-1.2, DO-1.5, CD-1.0, CD-1.1

Background / Purpose: RDD uses approximately 649,000 gallons of diesel annually in the heavy equipment used to bury refuse, excavate the landfill cells, and maintain the Miramar Landfill. This EMP is designed to maximize fuel conservation efforts and concurrently reduce emissions while increasing efficiency of the heavy equipment operation.

Objective: Emissions/Fuel Use Reduction

Related Significant Aspects: Fuel Consumption, Exhaust Emissions (Heavy Equipment)

Target: 10% overall fuel use reduction

Target Completion Date(s): August 1, 2002

Action Plan: Develop and implement SOPs for: heavy equipment warm-up times (20 minutes), periodic radiator “blow out”, shut down and restart procedures during break and lunch periods, and general equipment condition.

Responsible Person(s): Field Operations Program Manager, Disposal Site Supervisors, Equipment Operators

Resources Required: Tailgate sessions, supervisory guidance and monitoring, written SOPs, equipment lease contractor support

Environmental Performance Indicator(s): Equipment Fuel Logs, Equipment Division Annual Fuel Use Summary.

Comments (including other expected benefits or cost savings): Hourly rate (per piece of equipment) cost savings, diesel emissions reduction, equipment life extended through cooler running engines

Baseline Data: Baseline data was derived through fuel use logs (1999/2000), a 3-4 hour average idle time per piece of equipment per day, the Caterpillar Performance Manual (Oct. 2000) for fuel consumption figures, and 260 days at 100% equipment use. A 10% reduction in fuel based on idle times equates to 64,882 gallons of diesel, 4,569 operating hours, and \$575,684 in rate savings. In addition to 730 tons of CO², 3.3 tons of CO, 6.9 tons of NO_x, 0.9 tons of SO_x, and 0.8 tons of PM₁₀.

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Senior Landfill Engineer
Environmental Management Representative

EMP Schedule					
Step	Action Items	Responsibilities	Role	Schedule	Resources Required
1	Develop SOPs	Field Ops.P.M.	Lead	7/15/01	none
2	Tailgate Training on SOPs	D.S.S.	Lead	7/30/01	none
3	Brief Hawthorne Representative	EMR Field Ops.P.M.	Lead Support	8/1/01	none
4	Record Operating Hours	Equip. Operators D.S.S.	Lead Support	daily	none
5	Reconcile Operating hours	Field Ops.P.M. Service Writers	Lead Support	Bi-weekly	none

D.S.S. – Disposal Site Supervisor, EMR – Environmental Management Representative